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**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/450,558

Filing Date: November 30, 1999

Appellant(s): CARROLL ET AL.

Rick A. Toering  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 7, 2004.

**(1) Real Party in Interest**

The appellants' statement of the real party in interest contained in the brief is correct.

**(2) Related Appeals and Interferences**

The appellants' statement of the related appeals and interferences contained in the brief is correct.

**(3) Status of Claims**

The appellants' statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellants' statement of the issues contained in the brief is correct.

**(7) Grouping of Claims**

The appellants' statement of the grouping of the claims in the brief is correct.

**(8) ClaimsAppealed**

The copy of the appealed claims contained in the appendix pages 40-50 is correct.

**(9) Prior Art of Record**

Donohue et al., U.S. Patent Number 5,987,480, issued November 16, 1999, filed July 25, 1996.

Appleman et al., U.S. Patent Number 6,226,648 B1, issued May 1, 2001, earliest effective filing date February 6, 1998.

Poole et al., U.S. Patent Number 6,006,242, issued December 21, 1999, filed April 5, 1996.

World Wide Web Consortium, *HTML 3.2 Reference Specification*, W3C Recommendation 14 January 1997, pages 1-7, found online on March 18, 2003 at [www.w3.org/TR/REC-html32](http://www.w3.org/TR/REC-html32).

Crow et al., U.S. Patent Number 6,442,651 B2, issued August 27, 2002, filed October 28, 1997.

Cate Richards, *Using Lotus Notes 4.5* (Que: 1997), page 9.

**(10) New Prior Art**

No new prior art has been applied in this examiner's answer.

**(11) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims 1-61:

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claims 1-2, 6-7, 11, 14, 22-26, 29-30, 33-35, 37-38, 44-48, 51-52, 55-57, and 59-60** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 5,987,480 to Donohue et al., issued November 16, 1999, filed July 25, 1996.

Regarding **independent claim 1**, Donohue et al. disclose a data storage mechanism that stores the main document with a formula that resolves to a reference to an insert document, the insert document including contents for the main document. (Donohue et al., col. 6, lines 10-13: "The web page templates 24 stored on the web server 10 are markup language documents containing a number of dynamic content tags 34 and flow directives 36 embedded therein.")

Further, Donohue et al. disclose a shared resource database, accessible by a plurality of clients of the system, that stores one or more insert documents that may be referenced within the main document. (Donohue et al., col. 1, lines 5-65, col. 7, lines 37-41: "In some embodiments, the data source 12 is a relational database and includes a database storing content to be inserted into the templates 24 and a database management system for creating database structures, declaring data relationships, and performing database operations."); and type of content in a document including graphics and other images, video and audio segments, image maps, etc...)

Further, Donohue et al. disclose a document destination module that opens the main document and extracts the formula inasmuch as Donohue et al. teach a template parsing function. (Donohue et al., col. 10, lines 49-55: "The contents of the selected template are then retrieved, step 56, either all at once or by loading sections of the template sequentially into a buffer. The template parsing function 18 then reads the contents of the template to locate the "@" control symbols, step 58, and identifies the character string surrounded by the control symbols as a dynamic tag, IF instruction or LOOP instruction, step 60.")

Further, Donohue et al. disclose a formula resolution module that resolves the formula to derive a value for the reference, a document retrieval module that uses the reference to retrieve the insert document, and a document insertion module that inserts the insert document into the main document in a document location point specified. (Donohue et al., col. 10, lines 60-65: "For a dynamic tag, the template parser 18 calls the appropriate library function 22 to retrieve the value corresponding to the name in the

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tag from the container, step 62, and replace the dynamic tag, including the name and control symbols, with the value retrieved from the container, step 64.”)

Regarding **independent claim 6**, Donohue et al. disclose storing a main document with a formula that resolves to a reference to an insert document, the insert document including contents for the main document. (Donohue et al., col. 6, lines 10-13, quoted above.)

Further, Donohue et al. disclose storing one or more insert documents that may be referenced within the main document. (Donohue et al., col. 7, lines 37-41, quoted above.)

Further, Donohue et al. disclose retrieving and opening the main document. (Donohue et al., col. 10, lines 49-51, quoted above.)

Further, Donohue et al. disclose resolving the formula to derive a value for the reference, using the reference to retrieve the insert document, and inserting the insert document into the main document in a document insertion point. (Donohue et al., col. 10, lines 60-65, quoted above.)

Regarding **independent claim 11**, the rejection of claim 6 above is fully incorporated herein.

Further, Donohue et al. disclose extracting the formula from the main document. (Donohue et al., col. 10, lines 51-55, quoted above.)

Regarding **independent claim 14**, the rejection of claim 1 above is fully incorporated herein.

Further, Donohue et al. disclose a computer useable medium having computer readable code embodied therein. (Donohue et al., col. 6, line 2 – col. 3, line 24.)

Regarding **dependent claims 2 and 7**, Donohue et al. teach a document identification module and means that receives the reference and determines the name of the insert document to be retrieved based on the reference inasmuch as Donohue et al. teaches retrieving “the value corresponding to the name in the tag from the container.” (Donohue et al., col. 1, lines 55-65 and col. 10, lines 60-62.)

Regarding **dependent claims 22 and 44**, Donohue et al. teach the main document referenced to a plurality of insert documents inasmuch as they teach filling a plurality of data fields into one template. (Donohue et al., col. 1, lines 55-65 and col. 7, lines 49-55.)

Regarding **dependent claims 23 and 45**, Donohue et al. teach the insert document referenced to a plurality of main documents inasmuch as Donohue et al. teach a plurality of templates that can reference an insert document. (Donohue et al., col. 7, lines 16-17.)

Regarding **dependent claims 24-25 and 46-47**, Donohue et al. teach storing the main document and the insert document separately inasmuch as they teach storing templates on the web server (Donohue et al., col. 7, lines 15-17) and insert documents in a data source that may be on a different computer. (Donohue et al., col. 7, lines 36-38.) Note that the examiner does not regard the clause beginning with the words “in order to” in each of these claims to further limit the scope of the claim because the

clause merely recites an effect of implementing the recited method step or system element but do not further limit or define the step or element being recited.

Regarding **dependent claims 26 and 48**, Donohue et al. teach storing the insert document in a first database (Donohue et al., col. 7, lines 37-42) and also teach that the main document is stored in a second database inasmuch as they teach storing templates on the web server (Donohue et al., col. 7, lines 15-17) which comprises a database under the broadest reasonable interpretation of the term "database."

Regarding **dependent claims 29 and 51**, Donohue et al. teach that the main document is a non-HTML document inasmuch as they make clear that their invention has a scope broader than HTML documents. (Donohue et al., col. 4, lines 5-8.)

Regarding **dependent claims 30 and 52**, Donohue et al. teach that the insert document is a non-HTML document inasmuch as they teach insert documents comprising name/value pairs. (Donohue et al., col. 7, lines 45-47.)

Regarding **dependent claims 33 and 55**, Donohue et al. teach resolving a formula to a link, the link corresponding to one or more documents, wherein the link is used to identify and retrieve one or more insert documents inasmuch as Donohue et al. teach dynamic tags that are resolved to retrieve data to be inserted into a document. (Donohue et al., col. 7, line 64 – col. 8, line 8.)

Regarding **dependent claims 34 and 56**, Donohue et al. teach that the formula corresponds to a combination of one or more functions and one or more fields. (Donohue et al., col. 8, line 38 – col. 9, line 15.)

Regarding **dependent claims 35 and 57**, Donohue et al. teach the formula based on a function that determines a date and generates a link for the determined date. (Donohue et al., col. 7, lines 45-58, col. 9, lines 40-53, and Fig. 2.)

Regarding **dependent claims 37 and 59**, Donohue et al. teach receiving a request from a user to open the main document. (Donohue et al., col. 7, lines 27-30.)

Regarding **dependent claims 38 and 60**, Donohue et al. teach that the reference is a link and the link is other than a formula inasmuch as the dynamic tags taught by Donohue et al. are equivalent to formulas and dynamic tags are resolved to links to data. (Donohue et al., col. 7, lines 49-58.)

### ***Claim Rejections - 35 USC § 103***

**Claims 3, 8, 12, and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue et al. in view of U.S. Patent Number 6,226,648 B1 to Appleman et al. issued May 1, 2001, earliest effective filing date February 6, 1998.

Donohue et al. do not teach enabling a user to create the main document with the reference to the insert document and storing the main document with the reference separately from the insert document being referenced. However, Appleman et al. teach creation and uploading of HTML templates by a user (Appleman et al., col. 7, lines 51-54) wherein the templates contain references to included files, *i.e.*, insert documents. (Appleman et al., col. 8, lines 29-45.) Further, Appleman et al. would have motivated one of ordinary skill in the art to take this step inasmuch as they teach that their

approach eliminates or reduces the need to hard code design elements in a web page, promoting greater “design and maintenance flexibility.” (Appleman et al., col. 9, lines 22-41.) Therefore, it would have been obvious to one of ordinary skill in the art to have enabled a user to create the main document with the reference to the insert document and store the main document with the reference separately from the insert document being referenced.

**Claims 4, 9, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue et al. and Appleman et al. and further in view of U.S. Patent Number 6,006,242 to Poole et al., issued December 21, 1999, filed April 5, 1996.

Neither Donohue et al. nor Appleman et al. teaches enabling a user to define the formula that resolves to the reference to the insert document to be included in the main document. However, Poole et al. does teach such a limitation. (Poole et al., col. 5, lines 7-10: “Each of the constituent portions of the document is associated with an entity reference which is selected by the document developer, as is indicated at step 34.”) Moreover, one of ordinary skill in the art would have recognized that the user would have needed the ability to define the formula that resolves to the reference to the insert document to be included in the main document in order to ensure that the appropriate insert document was inserted. Therefore, it would have been obvious to one of ordinary skill in the art to enable a user to define the formula that resolves to the reference to the insert document to be included in the main document.

**Claims 5, 10, 32, and 54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue et al. in view of World Wide Web Consortium, *HTML 3.2 Reference Specification*, W3C Recommendation 14 January 1997, pages 1-7, found online on March 18, 2003 at [www.w3.org/TR/REC-html32](http://www.w3.org/TR/REC-html32) and Appleman et al.

Regarding **dependent claims 5 and 10**, Donohue et al. do not teach that the document location point comprises a background in the main document. However, *HTML 3.2 Reference Specification* teaches on page 6 that background is an attribute of HTML's <BODY> element, and further teaches on page 7 that the background attribute can be used to specify a URL (equivalent to a formula) "for an image that will be used to tile the document background." Moreover, Appleman et al. would have provided motivation to one of ordinary skill in the art to make background a document location point because Appleman et al. teaches the benefits of being able to soft-code design elements (Appleman et al., col. 9, lines 22-41), and one of ordinary skill in the art would have recognized that background is a design element. Therefore, it would have been obvious to one of ordinary skill in the art to have the document location point comprise a background in the main document.

Regarding **dependent claims 32 and 54**, Donohue et al. disclose that the main document includes a predefined portion (Donohue et al., col. 8, lines 25-38), but do not teach that the predefined portion may be specified to include an insert document representing a background for the main document. However, *HTML 3.2 Reference Specification* teaches on page 6 that background is an attribute of HTML's <BODY> element, and further teaches on page 7 that the background attribute can be used to

specify a URL (equivalent to a formula) "for an image that will be used to tile the document background." Moreover, Appleman et al. would have provided motivation to one of ordinary skill in the art to make the predefined portion specified to include an insert document representing a background for the main document Appleman et al. teaches the benefits of being able to soft-code design elements (Appleman et al., col. 9, lines 22-41), and one of ordinary skill in the art would have recognized that background is a design element. Therefore, it would have been obvious to one of ordinary skill in the art to allow the predefined portion to be specified to include an insert document representing a background for the main document.

**Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue et al. in view of Poole et al.

Donohue et al. do not teach enabling a user to define the formula that resolves to the reference to the insert document to be included in the main document. However, Poole et al. does teach such a limitation. (Poole et al., col. 5, lines 7-10: "Each of the constituent portions of the document is associated with an entity reference which is selected by the document developer, as is indicated at step 34.") Moreover, one of ordinary skill in the art would have recognized that the user would have needed the ability to define the formula that resolves to the reference to the insert document to be included in the main document in order to ensure that the appropriate insert document was inserted. Therefore, it would have been obvious to one of ordinary skill in the art to

enable a user to define the formula that resolves to the reference to the insert document to be included in the main document.

**Claims 17, 36, 39, 58, and 61** are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue et al. in view of U.S. Patent Number 6,442,651 B2 to Crow et al., issued August 27, 2002, filed October 28, 1997.

Regarding **dependent claims 17 and 39**, Donohue et al. do not teach a continuous resolving module that resolves the formula continuously. However, Crow et al. teach periodically refreshing a cache equivalent to applicants' recitation of continuously resolving a formula including objects, *i.e.*, insert documents, embedded in web pages. (Crow et al., col. 4, lines 52-55.) Moreover, one of ordinary skill in the art would have recognized the benefit of having the most up-to-date data possible. Therefore, it would have been obvious to one of ordinary skill in the art to resolve the formula continuously.

Regarding **dependent claims 36 and 58**, Donohue et al. teach resolving the link to a field representing an image for the main document (col. 1, lines 55-65: documents contain text and other types of contents, including graphics and images which are displayed in the documents). However, Donohue et al. do not explicitly disclose the link is continuously resolved. Crow et al. teach periodically refreshing a cache equivalent to applicants' recitation of continuously resolving a formula including objects, *i.e.*, insert documents, embedded in web pages. (Crow et al., col. 3, lines 53-54, col. 4, lines 52-55.) Moreover, one of ordinary skill in the art would have recognized the benefit of

having the most up-to-date data, including the most up-to-date images, possible. Therefore, it would have been obvious to one of ordinary skill in the art to continuously resolve the link to a field representing an image for the main document.

Regarding **independent claim 61**, Donohue et al. teach enabling a user to open the main document (Donohue et al., col. 7, lines 27-30), the main document stored in a first database including a formula to one or more insert documents stored in a second database (Donohue et al., col. 8, lines 10-13.)

Further, Donohue et al. teach resolving the formula in order to identify at least one corresponding insert document, the insert document including contents for the main document. (Donohue et al., col. 6, lines 10-13: "The web page templates 24 stored on the web server 10 are markup language documents containing a number of dynamic content tags 34 and flow directives 36 embedded therein.")

Further, Donohue et al. teach retrieving the identified insert document from the second database. (Donohue et al., col. 9, lines 16-17.)

Further, Donohue et al. teach inserting the identified insert document into the main document at a predetermined document location point. (Donohue et al., col. 10, lines 60-65: "For a dynamic tag, the template parser 18 calls the appropriate library function 22 to retrieve the value corresponding to the name in the tag from the container, step 62, and replace the dynamic tag, including the name and control symbols, with the value retrieved from the container, step 64.")

Further, Donohue et al. do not teach resolving the formula continuously. However, Crow et al. teach periodically refreshing a cache equivalent to applicants'

recitation of continuously resolving a formula including objects, *i.e.*, insert documents, embedded in web pages. (Crow et al., col. 4, lines 52-55.) Moreover, one of ordinary skill in the art would have recognized the benefit of having the most up-to-date data possible. Therefore, it would have been obvious to one of ordinary skill in the art to resolve the formula continuously. Note that the examiner does not regard the clauses beginning with the words “in order to” in this claim to further limit the scope of the claim because the clauses merely recite an effect of implementing the recited method step element but do not further limit or define the step or element being recited.

**Claims 27-28, 31, 49-50, and 53** are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue et al. in view of Cate Richards, *Using Lotus Notes 4.5* (Que: 1997), page 9.

Regarding **dependent claims 27-28 and 49-50**, Donohue et al. do not teach that either the first database or the second database is a Lotus Notes database. However, Richards would have provided motivation for one of ordinary skill in the art to make the first and second databases Lotus Notes databases inasmuch as Richards teaches on page 9 that Lotus Notes databases were easy to develop. Therefore, it would have been obvious to one of ordinary skill in the art to make the first database and the second database Lotus Notes databases.

Regarding **dependent claims 31 and 53**, Donohue et al. inherently teach that the insert document stored in the first database can be modified to a modified insert document, wherein the modified insert document is inserted into the main document in

response to the user selecting the main document inasmuch as Donohue et al. teaches storing inserts documents in a database as noted above regarding claims 26 and 48 and thus the insert documents taught by Donohue et al. inherently could have been modified to a modified insert document, wherein the modified insert document is inserted into the main document in response to the user selecting the main document.

(12) **Response to Argument**

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellants' arguments filed on June 7, 2004, the appellants argue in substance:

**Rejection Under 35 U.S.C. §112, First Paragraph**

Appellants' arguments, see page 6 of brief, with respect to Rejection Under 35 U.S.C. §112, First Paragraph, have been fully considered and are persuasive. The Rejection Under 35 U.S.C. §112, First Paragraph of claims 17-21 and 39-43 has been withdrawn.

**Rejection Under 35 U.S.C. §112, Second Paragraph**

Appellants' arguments, see page 7 of brief, with respect to Rejection Under 35 U.S.C. §112, Second Paragraph, have been fully considered and are persuasive. The

Rejection Under 35 U.S.C. §112, Second Paragraph of claims 17-21 and 39-43 has been withdrawn.

**Independent claims 1, 6, 11 and 14 and dependent claims 5, and 10**

"Claim 1 includes, inter alia, the features of "the main document with a formula that resolves to a reference to an insert document, the insert document including contents for the main document" and "a document insertion module that inserts the insert document into the main document." At least these features are not disclosed by Donohue". (See page 8 of Brief)

**In reply** to argument in **claim 1**, applicants described in the specification, page 8, lines 7-8 such that an insert document may include bitmaps, voice, movies, images, etc. Donohue et al. disclose web documents contain text, which text should be hyperlinked to other parts of the document or other documents, and where other types of content, including graphics and other images, video and audio segments, and image maps, should be retrieved from and displayed in the document.

**Dependent claims 2 and 7**

"Furthermore, claim 2 recites, inter alia, "a document identification module that receives a reference and determines the name of the insert document to be retrieved

based on the reference.” Claim 7 recites similar features to claim 2. These features are note disclosed by Donohue.” (See page 9 of Brief)

**In reply** to argument in **claim 2 and 7**, Donohue et al. disclose “For a dynamic tag (reference), the template parser 18 calls the appropriate library function 22 to retrieve the value (insert document) corresponding to the name in the tag from the container...” in col. 10, lines 60-62.

**Dependent claims 22 and 44**

“Further more, claims 22 and 44 further recite, inter alia, “wherein the main document is referenced to a plurality of insert documents.” This feature is not disclosed by Donohue.” (See page 10 of Brief)

**In reply** to argument in **claims 22 and 44**, Donohue et al. disclose filling a plurality of data fields into one template (col. 7, lines 45-58). Donohue et al. also disclose in column 1, lines 55-65 that a document has types of content including graphics, images, video and audio segments, and image maps, which are retrieved from and displayed in the document.

**Dependent claims 23 and 45**

"Furthermore, claims 23 and 45 recite, inter alia, "wherein the insert document is referenced to a plurality of main documents." This feature is not disclosed by Donohue." (See page 11 of Brief)

In reply to argument in **claims 23 and 45**, Donohue et al. disclose a plurality of templates that can reference an insert document (col. 7, lines 16-17).

**Dependent claims 24-25 and 46-47**

"Furthermore, claims 24 and 46 recite, inter alia, "wherein the main document is stored separately from the insert document in order to reduce the amount of disk space required to store the main document and enable efficient modification of the insert document that is referenced to multiple main documents" This feature is not disclosed by Donohue." (See page 12 of Brief)

In reply to argument in **claims 24-25 and 46-47**, Donohue et al. disclose storing templates on the web server (Donohue et al., col. 7, lines 15-17) and insert documents in a data source that may be on a different computer. (Donohue et al., col. 7, lines 36-38.) Note that the examiner does not regard the clause beginning with the words "in order to" in each of these claims to further limit the scope of the claim because the

clause merely recites an effect of implementing the recited method step or system element but do not further limit or define the step or element being recited.

**Dependent claims 26 and 48**

"Furthermore, claims 26 and 48 recite, inter alia, "wherein the insert document is stored in a first database and the main document is stored in a second database." This feature is not disclosed by Donohue." (See page 13 of Brief)

In reply to argument in **claims 26 and 48**, Donohue et al. disclose web server stores a plurality of document templates (main documents), and data source 12 is a relational database including a database storing content to be inserted into the templates (col. 7, line 15-44).

**Dependent claims 29, 30, 51, and 52**

"Furthermore, claims 29 and 51 recite, inter alia, "wherein the main document is a non-HTML document." Similarly, claims 30 and 52 recite, inter alia, "wherein the insert document is a non-HTML document." These features are not disclosed by Donohue." (See page 14 of Brief)

In replay to argument in **claims 29, 30, 51, and 52**, Donohue et al. disclose that the main document is a non-HTML document inasmuch as they make clear that their invention has a scope broader than HTML documents (Donohue et al., col. 4, lines 5-8). Donohue et al. teach that the insert document is a non-HTML document inasmuch as they teach insert documents comprising name/value pairs (Donohue et al., col. 7, lines 45-47).

**Dependent claims 31 and 53**

"Furthermore, claims 31 and 53 recite, inter alia, "wherein the insert document stored in said first database can be modified to a modified insert document, wherein the modified insert document is inserted into the main document in response to user selecting the main document." This feature is not disclosed by Donohue." (See page 15 of Brief)

In replay to argument in **claims 31 and 53**, Donohue et al. inherently teach that the insert document stored in the first database can be modified to a modified insert document, wherein the modified insert document is inserted into the main document in response to the user selecting the main document inasmuch as Donohue et al. teaches storing inserts documents in a database as noted above regarding claims 26 and 48 and thus the insert documents taught by Donohue et al. inherently could have been

modified to a modified insert document, wherein the modified insert document is inserted into the main document in response to the user selecting the main document.

**Dependent claims 33 and 55**

"Furthermore, claim 33 includes, inter alia, the feature "wherein the formula resolution module resolves a formula to a link, said link corresponding to one or more documents, wherein said link is used to identify and retrieve one or more insert documents." Claim 55 includes a similar feature. Donohue fails to disclose this feature." (See page 16 of Brief)

In reply to argument in **claims 33 and 55**, Donohue et al. disclose dynamic tags that are resolved to retrieve data to be inserted into a document. (Donohue et al., col. 7, line 64 – col. 8, line 8.) Donohue et al also disclose web documents contain text and a number of tags which provide instructions as to how the text should be display, which text should be hyperlinked to other parts of the document or other documents (col. 1, lines 55-65).

**Dependent claims 34 and 56**

"Further more, claims 34 and 56 recite, inter alia, "wherein the formula corresponds to combination of one or more functions and one or more fields." This feature is not disclosed by Donohue." (See page 17 of Brief)

**In reply** to argument in **claims 34 and 56**, Donohue et al. disclose the template 24 (main document) contains dynamic tags (links) including different fields and several flow directives (functions) (col. 8, line 38 – col. 9, line 15).

**Dependent claims 45 and 57**

"Furthermore, claims 35 and 57 include, inter alia, the feature "wherein the formula may be defined based on a function, wherein the function determines a date and generates a link for the determined date." Donohue fails to disclose this feature." (See page 18 of Brief)

**In reply** to argument in **claims 35 and 57**, Donohue et al. disclose function "if" including a date aOrder Date@00 (col. 7, lines 45-58, col. 9, lines 40-53, and Fig. 2).

**Dependent claims 37 and 59**

"Furthermore, claim 37 recites, inter alia, "a request receiving module that receives a request from a user to open the main document." Claim 59 recite a similar feature. This feature is not disclosed by Donohue." (See page 19 of Brief)

**In reply** to argument in **claims 37 and 59**, Donohue et al. disclose client computers send URLs requesting particular documents or pages from the server 10,

and the server responds by delivering the documents or pages to the client computers (col. 7, lines 25-34).

**Dependent claims 38 and 60**

"Furthermore, claim 38 includes, inter alia, the feature "wherein the formula resolution module resolves a formula to a link, said link corresponding to one or more documents, wherein said link is used to identify and retrieve one or more insert documents." Claim 60 recites a similar feature. Donohue fails to disclose this feature." (See page 19 of Brief)

In reply to argument in **claims 38 and 60**, Donohue et al. disclose that the reference is a link and the link is other than a formula inasmuch as the dynamic tags taught by Donohue et al. are equivalent to formulas and dynamic tags are resolved to links to data. (Donohue et al., col. 7, lines 49-58.)

**Dependent claims 3, 8, 12 and 15**

Appellants submit that neither Donohue, nor Appleman, set forth any teaching, suggestion, or motivation to combine the two references. Further, Appellants contend that no motivation or suggestion to combine Donohue or Appleman may be found in the

knowledge generally available to those skilled in the art. In addition. (See page 22 of Brief)

**In reply** to argument in **claims 3, 8, 12, and 15**, the appellants' arguments that the combination of the cited prior art references neither teaches nor suggests the specific limitations above and there is no teaching or suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Donohue et al. do not teach enabling a user to create the main document with the reference to the insert document and storing the main document with the reference separately from the insert document being referenced. However, Appleman et al. teach creation and uploading of HTML templates by a user (Appleman et al., col. 7, lines 51-54) wherein the templates contain references to included files, i.e., insert documents. (Appleman et al., col. 8, lines 29-45.) Further, Appleman et al. would have motivated one of ordinary skill in the art to take this step inasmuch as they teach that their approach eliminates or reduces the need to hard code design elements in a web page, promoting greater "design and maintenance flexibility." (Appleman et al., col. 9, lines 22-41.) Therefore, it would have been obvious to one of ordinary skill in the art

to have enabled a user to create the main document with the reference to the insert document and store the main document with the reference separately from the insert document being referenced.

**Dependent claims 4, 9, and 13**

"Furthermore, claim 4 includes, *inter alia*, the feature of "a formula definition module that enables a user to define a formula that resolves to a reference to an insert document to be included in the main document." Claims 9 and 13 recite similar features. Donohue, Appleman, and Poole, either alone or in combination with one another, fail to teach or suggest these features." And "Furthermore, there is no legally proper suggestion to combine Donohue, Appleman and Poole. Appellants submit that the combination of Donohue, Appleman, and Poole constitutes impermissible hindsight."

(See pages 23-24 of Brief)

In reply to argument in **claims 4, 9, and 13**, the appellants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed.

Cir. 1992). Also, In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCP 1971), clearly states “any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within level of ordinary skill at the time claimed invention was made and does not include knowledge gleaned only from applicants’ disclosure, reconstruction is proper”.

In this case, neither Donohue et al. nor Appleman et al. teaches enabling a user to define the formula that resolves to the reference to the insert document to be included in the main document. However, Poole et al. does teach such a limitation. (Poole et al., col. 5, lines 7-10: “Each of the constituent portions of the document is associated with an entity reference which is selected by the document developer, as is indicated at step 34.”) Moreover, one of ordinary skill in the art would have recognized that the user would have needed the ability to define the formula that resolves to the reference to the insert document to be included in the main document in order to ensure that the appropriate insert document was inserted. Therefore, it would have been obvious to one of ordinary skill in the art to enable a user to define the formula that resolves to the reference to the insert document to be included in the main document.

#### **Dependent claims 32 and 54**

“Furthermore, claims 32 and 54 recite, inter alia, “wherein the main document includes a pre-defined portion, said pre-defined portion may be specified to include an

insert document." This feature is not taught or suggested by Donohue" (See page 25 of Brief)

**In reply** to argument in **claims 32 and 54**, appellants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, Donohue et al. disclose that the main document includes a predefined portion (Donohue et al., col. 8, lines 25-38), but do not teach that the predefined portion may be specified to include an insert document representing a background for the main document. However, *HTML 3.2 Reference Specification* teaches on page 6 that background is an attribute of HTML's <BODY> element, and further teaches on page 7 that the background attribute can be used to specify a URL (equivalent to a formula) "for an image that will be used to tile the document background." Moreover, Appleman et al. would have provided motivation to one of ordinary skill in the art to make the predefined portion specified to include an insert document representing a background for the main document. Appleman et al. teaches the benefits of being able to soft-code design elements (Appleman et al., col. 9, lines 22-41), and one of ordinary skill in the art would have recognized that background is a design element. Therefore, it would have been obvious to one of ordinary skill in the art

to allow the predefined portion to be specified to include an insert document representing a background for the main document.

**Dependent claim 16**

"Furthermore, claim 16 includes, *inter alia*, the feature of "computer readable program code means for causing a computer to enable a user to define a formula that resolves to a reference to an insert document to be included in the main document." Donohue, either alone or in combination with one another, fail to teach or suggest this feature." And "Furthermore, there is no legally proper suggestion to combine Donohue with Poole. Appellants submit that the combination of Donohue and Poole constitutes impermissible hindsight." (See page 27-28 of Brief)

In reply to argument in **claim 16**, the appellants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Also, *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCP 1971), clearly states "any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight

reasoning, but so long as it takes into account only knowledge which was within level of ordinary skill at the time claimed invention was made and does not include knowledge gleaned only from applicants' disclosure, reconstruction is proper".

In this case, Donohue et al. do not teach enabling a user to define the formula that resolves to the reference to the insert document to be included in the main document. However, Poole et al. does teach such a limitation. (Poole et al., col. 5, lines 7-10: "Each of the constituent portions of the document is associated with an entity reference which is selected by the document developer, as is indicated at step 34.") Moreover, one of ordinary skill in the art would have recognized that the user would have needed the ability to define the formula that resolves to the reference to the insert document to be included in the main document in order to ensure that the appropriate insert document was inserted. Therefore, it would have been obvious to one of ordinary skill in the art to enable a user to define the formula that resolves to the reference to the insert document to be included in the main document.

#### Independent claim 61

Neither Donohue, nor Crow, set forth any teaching, suggestion, or motivation to combine the two references. Donohue and Crow, both alone and in combination with one another, do not teach or suggest resolving the formula in order to identify at least one corresponding insert document, said at least one corresponding insert document including contents for said main document; inserting said identified insert document into

said main document at a pre-determined document location point; and resolving the formula continuously in order to modify said identified insert document that is inserted in the main document. (See page 29-32 of Brief)

**In reply** to argument in **claim 61**, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Also, *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCP 1971), clearly states "any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within level of ordinary skill at the time claimed invention was made and does not include knowledge gleaned only from applicants' disclosure, reconstruction is proper".

In this case, Donohue et al. teach resolving the formula in order to identify at least one corresponding insert document, the insert document including contents for the main document. (Donohue et al., col. 6, lines 10-13: "The web page templates 24 stored on the web server 10 are markup language documents containing a number of dynamic content tags 34 and flow directives 36 embedded therein.")

Further, Donohue et al. teach inserting the identified insert document into the main document at a predetermined document location point. (Donohue et al., col. 10,

lines 60-65: "For a dynamic tag, the template parser 18 calls the appropriate library function 22 to retrieve the value corresponding to the name in the tag from the container, step 62, and replace the dynamic tag, including the name and control symbols, with the value retrieved from the container, step 64.")

Further, Donohue et al. do not teach resolving the formula continuously. However, Crow et al. teach periodically refreshing a cache equivalent to applicants' recitation of continuously resolving a formula including objects, *i.e.*, insert documents, embedded in web pages. (Crow et al., col. 4, lines 52-55.) Moreover, one of ordinary skill in the art would have recognized the benefit of having the most up-to-date data possible. Therefore, it would have been obvious to one of ordinary skill in the art to resolve the formula continuously. Note that the examiner does not regard the clauses beginning with the words "in order to" in this claim to further limit the scope of the claim because the clauses merely recite an effect of implementing the recited method step element but do not further limit or define the step or element being recited.

**Dependent claims 17 and 39**

Arguments in claims 17 and 39 are the same as claim 61. Please see reply to claim 61 above.

**Dependent claims 36 and 58**

Donohue and Crow, both alone and in combination, do not teach or suggest the link is continuously resolved to a field representing an image for the main document. (See page 34 of Brief)

In reply to argument in **claims 36 and 58**, Donohue et al. teach resolving the link to a field representing an image for the main document (col. 1, lines 55-65: documents contain text and other types of contents, including graphics and images which are displayed in the documents). However, Donohue et al. do not explicitly disclose “the link is continuously resolved.” Crow et al. teach periodically refreshing a cache equivalent to applicants’ recitation of continuously resolving a formula including objects, i.e., insert documents, embedded in web pages. (Crow et al., col. 3, lines 53-54, col. 4, lines 52-55.) Moreover, one of ordinary skill in the art would have recognized the benefit of having the most up-to-date data, including the most up-to-date images, possible. Therefore, it would have been obvious to one of ordinary skill in the art to continuously resolve the link to a field representing an image for the main document.

**Dependent claims 27, 28, 49, and 50**

“Dependent claims 26 and 48 recite “wherein the insert document is stored in a first database and the main document is stored in a second database.” Furthermore, claims 27 and 49 include the additional features “wherein the first database is a LotusNotes database.” Similarly, claims 28 and 50 recite, inter alia, “wherein the

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second database is a LotusNotes database." These features are not taught or suggested by Donohue or Richards." (See page 35 of Brief)

In reply to argument in **claims 27, 28, 49, and 50**, Donohue et al. disclose web server stores a plurality of document templates (main document), and data source 12 is a relational database and includes a database storing content to be inserted into the templates (col. 7, lines 15-44). However, Donohue et al. do not explicitly disclose that either the first database or the second database is a Lotus Notes database. Richards would have provided motivation for one of ordinary skill in the art to make the first and second databases Lotus Notes databases inasmuch as Richards teaches on page 9 that Lotus Notes databases were easy to develop. Therefore, it would have been obvious to one of ordinary skill in the art to make the first database and the second database Lotus Notes databases.

**Failure to Enter the Amendment after Final** (See page 36 of Brief)

Examiner will not address this point since examiner did not enter the Amendment filed on November 26, 2003. Therefore, there is no reason to discuss the Amendment after Final.

For the above reasons, it is respectfully submitted that the rejections should be sustained.

Conferee:

  
**JOSEPH FEILD**  
**SUPERVISORY PATENT EXAMINER**



**STEPHEN S. HONG**  
**PRIMARY EXAMINER (SPE)**

Respectfully Submitted,

  
**Chau Nguyen**

  
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